REMARKS

In the Office Action, the Examiner rejected claims 1-24. By this paper, no claims are cancelled or added. Accordingly, claims 1-24 remain pending in the present application and are believed to be in condition for allowance. Claims 1, 8, 15 and 22 are amended herein.

In the Office Action, the Examiner objected to the specification as not sufficiently denoting the propriety nature of trademarks. Further, the Examiner rejected claims 1-7 and 15-21 as being directed to non-statutory subject matter. In addition the Examiner rejected claims 1-24 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Publication No. 2001/0034771 to Hutsch et al., ("the Hutsch reference"). The objection and each of the rejections is addressed in detail below.

Objection to the Specification

With respect to the objection to the specification, the Examiner stated the following:

> 4. The use of the trademarks JAVA.TM., JAVABEANS.TM., JAVASERVER PAGEG.TM., J2EE.TM., ... has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.
>
> Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks. Appropriate correction is required.
>
> Office Action, p. 2

While the Applicants do not concede to the correctness of the objection, nonetheless, Applicants have amended the specification so as to overcome the rejection. The amendments do not add any new matter. Applicants respectfully request the Examiner to enter the above amendments to the specification and remove the objection to the specification.

The Rejection Under 35 U.S.C. § 101

With respect to the rejection of claims 1-7 and 15-21 under 35 U.S.C. §101 the Examiner stated the following:

> Claims 1 and 15 recite "A system for creating web applications ...", which comprises only software components (i.e., *"a controller generator"* and *"a configurator generator"*).
>
> Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory (emphasis added).
>
> Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contract, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions (emphasis added). See MPEP 2106.01(I).

> Claims 2-7 and 15-21 further recite functional descriptions of said software components and do not redemy [sic] the deficiencies of independent claims 1 and 15 respectively.
>
> Under the principles of compact prosecution, claims 1-7 and 15-21 have been examined as the Examiner anticipates the claims will be a mended to obviate these 35 USC §101 issues. For example (for proposal only), - A system stored on a machine readable medium for creating web applications, ...- - as recited in independent claim 22 and in view of FIG. 2 and paragraph [0017], "*...The illustrated WPA 100, which may be adapted to execute on a processor-based device such as a computer system or the like...* ".
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> Office Action, p. 3-4.

The Applicants respectfully assert that the present claims are directed to statutory subject matter. Any analysis of whether a claim is directed to statutory subject matter begins with the language of 35 U.S.C. §101, which reads:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

In interpreting Section 101, the Supreme Court stated that Congress intended statutory subject matter to "include *anything* under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 309, 206 U.S.P.Q. 193, 197 (1980) (emphasis added). Although this statement may appear limitless, the Supreme Court has identified three categories of unpatentable subject matter: laws of nature, natural phenomena, and abstract ideas. *See*, *Diamond v. Diehr*, 450 U.S. 175, 182, 209 U.S.P.Q. 1, 7 (1981). Accordingly, so long as a claim is not directed to one of the three specific areas listed above, the claim is directed to patentable subject matter. Thus, it is improper to read restrictions into Section 101 regarding subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitation. *In re Alappat*, 31 U.S.P.Q.2d 1545, 1556 (Fed. Cir. 1994) (citing *Chakrabarty* 447 U.S. at 308).

For example, the fact that a claim includes or is directed to an algorithm is no ground for holding a claim is directed to non-statutory subject matter. *See, In re Iwashashi*, 12 U.S.P.Q.2d 1908, 1911 (Fed. Cir 1989). Rather, the proscription against patenting an algorithm, to the extent it still exists, is narrowly limited to *mathematical algorithms in the abstract*, e.g., describing a mathematical algorithm as a procedure for solving a given type of mathematical problem. *See, AT&T Corp. v. Excel Communications, Inc.*, 50 U.S.P.Q.2d 1447, 1450 (Fed. Cir 1999). Indeed, the courts are aware that any step-by-step process, be it electronic, chemical, or mechanical, involves an algorithm. *Id.* at 1450.

Thus, inquiry into what is statutory subject matter simply requires "an examination of the contested claims to see if the claimed subject matter as a whole is a disembodied mathematical concept representing nothing more than a 'law of nature' or an 'abstract idea, or if the mathematical concept has been reduced to some practical application rendering it 'useful'" *Id.* at 1451 (citing and quoting *In re Alappat*, 31 U.S.P.Q.2d at 1557). Furthermore, a Section 101 analysis "demands that the focus in any statutory subject matter analysis be on the *claim as a whole*." *In re Alappat*, 31 U.S.P.Q.2d at 1557 (citing *Diehr*, 450 U.S. at 192) (emphasis in original). Indeed, the dispositive inquiry is whether the claim *as a whole* is directed to statutory subject matter, it is irrelevant that a claim may contain, as part of the whole, subject matter that would not be patentable by itself. *Id.*

The Applicants respectfully disagree with the Examiner's assertions and interpretation of the law. Indeed, the Applicants contend that the Examiner's assertion that software inventions are *per se* non-statutory flies in the face of the clear precedent of the Federal Circuit, as set forth above. Moreover, the systems recited in independent claims 1 and 15 are

clearly useful for "creating web applications" and are fully supported by the specification as set forth above. This is all the law requires in order to comply with Section 101. Accordingly, Applicants submit that independent claims 1 and 15 are directed to statutory subject matter.

In addition, the Examiner's reliance on *In re Warmerdam* as set forth in M.P.E.P. Section 2106.01 is misplaced. In *Warmerdam*, the Federal Circuit concluded that the applicant's method claims were directed to nonstatutory subject matter because they related to *method steps* involving the mere manipulation of abstract ideas. With respect to the applicant's claim directed to "a machine," the court stated that those claims were "clearly patentable subject matter." *Warmerdam*, 31 U.S.P.Q. 2d at 1759. Applicants' claims in this case, which are directed to "a system," are clearly statutory in view of *Warmerdam*.

In view of the arguments presented above, Applicants contend that the rejection of claims 1-7 and 15-21 is improper. Accordingly, Applicants request the Examiner to withdraw the rejection of claims 1-7 and 15-21 under Section 101.

Claim Rejections Under 35 U.S.C. § 102

With respect to the rejection of 35 U.S.C. §102(b) as anticipated by the Hutsch reference, the Examiner's rejection of claims 1, 8, 15 and 22 is exemplary:

> **Claim 1:** Hutsch discloses a system for creating web applications (e.g., FIG. 3A, [0115]; FIG. 8, [0234-0245]), the system comprising:
>
> *a controller generator that is adapted to provide a web application with a controller and receives a request for data from a user and responds to the request by sending information to the user* (e.g., FIG. 8, Web Server 320 provides web applications to Client Browser 304 after receiving HTTP request, [0237-0245]; 0178-0181]); and

a configurator generator that is adapted to provide a configurator that loads configuration information for use by the controller from a configuration file and stores the configuration information for subsequent access (e.g., loading/accessing Configuration files [0165], [0176], [0237];

FIG. 8, Configuration Service 336, Profiling Service Configuration File 802, Profiling Service 801, [0237-0239], [0115];

FIG. 15, Configuration Databases 337, Cache 1560 in Configuration Server, [0346-0356]); and

[0239], [0327-0329], caching configuration information for subsequent access).

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Claim 8: Hutsch also *a method of creating web applications, the method comprising:*

Creating, with a processor-based device, a controller that receives a request for data from a user and responds to the request by sending information to the user (e.g., FIG. 8, Web Server 320 provides web applications to Client Browser 304 after receiving HTTP request, [0237-0245]; [0178-0181]); and

Providing a configurator that loads configuration information for use by the controller from a configuration file and stores the configuration information for subsequent access (e.g., loading/accessing Configuration files [0165], [0176], [0237];

FIG. 8, Configuration Service 336, Profiling Service Configuration File 802, Profiling Service 801, [0237-0239], [0115];

FIG. 15, Configuration Data 337, Cache 1560 in Configuration Server, [0346-0356]); and

[0239], [0327-0329], caching configuration information for subsequent access).

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Claim 15: Hutsch discloses a *system for creating web applications, the system comprising:*

means for creating a controller that is adapted to receive a request for data from a user and respond to the request (e.g., FIG. 8, Web Server 320 provides web applications to Client Browser 304 after receiving HTTP request, [0237-0245]; [0178-0181]); and

means for creating a configurator that loads configuration information for use by the controller from a configuration file and stores the configuration information for subsequent access (e.g., loading/accessing Configuration files [0165], [0176], [0237];

FIG. 8, Configuration Service 336, Profiling Service Configuration File 802, Profiling Service 801, [0237-0239], [0115];

FIG. 15, Configuration Data 337, Cache 1560 in Configuration Server, [0346-0356]); and

[0239], [0327-0329], caching configuration information for subsequent access).

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Claim 22: Hutsch discloses a *machine readable medium, comprising:*

a controller generator stored on the machine readable medium, the controller generator being adapted to provide a web application with a controller that receives a request for data from a user and responds to the request by sending information to the user (e.g., FIG. 8, Web Server 320 provides web applications to Client Browser 304 after receiving HTTP request, [0237-0245]; [0178-0181]); and

a configurator generator stored on the machine readable medium, the configurator generator being adapted to provide a configurator that loads configuration information for use by the controller from a configuration file and stores the configuration information for subsequent access (e.g., loading/accessing Configuration files [0165], [0176], [0237];

FIG. 8, Configuration Service 336, Profiling Service Configuration File 802, Profiling Service 801, [0237-0239], [0115];

FIG. 15, Configuration Data 337, Cache 1560 in Configuration Server, [0346-0356]); and

[0239], [0327-0329], caching configuration information for subsequent access).

Office Action, pp. 5-10.

Legal Precedent

The Applicants respectfully traverse this rejection. Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a single reference must teach each and every limitation of

the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, the Applicant needs only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

Turning now to the claims, for example, independent claim 1 recites a system for creating web applications, the system including a "configurator that loads configuration information for use by a controller from a *cached* configuration file *that originated from a backend data store*." (Emphasis added). Similarly independent claim 8 recites a method providing a configurator that loads configuration information for use by the controller from "a *cached* configuration file *that originated from a backend data store*." (Emphasis added). Independent claims 15 and 22 recite similar subject matter, with claim 15 reciting means plus function language and claim 22 reciting a tangible machine readable medium. Hence, instead of retrieving data from the backend data stores for each individual request, the above claims provide for a configurator adapted to store the data in a cache, thereby permitting repeatedly accessing the data in an efficient manner.

Applicants respectfully submit that the rejection under Section 102 is improper because the prior art reference that is used to reject the claims does not contain each and every element recited by the claims. In fact, the Hutsch reference discloses subject matter clearly contradictory to the newly amended claims. Particularly, in the Hutsch reference, the configuration file is stored on and is retrieved by *backend storage* devices. This is clearly illustrated by FIG. 15 of the Hutsch reference, specifically, by element 337 illustrating configuration files stored on the configuration Back-End (databases) 337. In addition, the Hutsch reference discloses the following:

> configuration server 336 in response to the access by proxy 1510 communicates with a configuration back end 337 to load the data in a configuration tree or to store persistent modifications.
>
> Hutsch, paragraph 326 and FIG. 15.

Thus, in Hutsch, responses to requests are handled by accessing the backend storage devices for the configuration information. Again, this clearly contradicts the claimed configuration file that is not retrieved from backend data stores, as recited by independent claims 1, 8 15 and 22.

For at least these reasons, Applicants submit that the rejection of the claims under Section 102 is defective and that a *prima facie* case of anticipation based on the Hutsch reference can not be established with regard to claims 1, 8, 15 and 22 (and the claims dependent thereon). Accordingly, Applicants respectfully request the Examiner to withdraw the rejection and allow independent claims 1, 8, 15 and 22, as well as those claims dependent thereon.

Hutsch Does Not Anticipate dependent Claims 3, 10, 17 and 23

Applicants submit that the rejections of dependent claims 3, 10, 17 and 23 are improper because the Hutsch reference does not disclose each and every element recited by those claims. For example, dependent claims 3, 10, 17 and 23 recite a configurator adapted "to store the *configuration information as a singleton object.*" (Emphasis added.) As appreciated by those of ordinary skill in the art in light of Applicants' disclosure, a singleton object is:

> an object that exists in memory such that only one of that type of object exists at any time in memory. Once created, a

> singleton object is not destroyed after use, like most objects, but is kept in memory until accessed again.
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> Application, paragraph 37.

The Hutsch reference does not disclose any singleton object, and particularly, not a singleton object having properties such as those described above. In fact, as recited by the Examiner, the Hutsch reference discloses modification of data after the data is stored. *See,* Hutsch, paragraph 327. This suggests that the previously stored data may no longer exists, i.e., destroyed. Therefore, such an object is not a singleton object. In view of this, the reference cannot anticipate the subject matter of claims 3, 10, 17 and 23.

Conclusion

The Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

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